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A Study of the Placement in the Curriculum of Selected Teachings of the Old Testament Prophets

by

RALPH THOMAS CASE, Ph.D.

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UNIVERSITY OF IOWA STUDIES IN CHARACTER

EDWIN D. STARBUCK, Editor

FROM THE INSTITUTE OF CHARACTER RESEARCH

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CHAPTER I

THE PROBLEM

This study is concerned with an important problem of the curriculum: the proper placement of material. In this instance, the investigation deals with selected prophetic passages from the Old Testament, of use in the curriculum of religious and character education. The method used to solve this problem involves the construction of a test to measure the comprehension of these materials by a wide range of school children.

During the developments in religious education in the last century or two the Bible has largely furnished the curriculum materials. The dominant attitude has assumed that if material was from the Bible, it would be unquestionably satisfactory, regardless of other considerations. With the coming of Uniform and Graded Lessons, and with rapid developments in general education, efforts have been increasingly put forth to put curriculum building in the field of religious education on a sounder scientific basis. While the importance of the Bible is still recognized, the approach to it has changed. As Professor George H. Betts (1, p. 329) states regarding the religious curriculum, "The incomparable source of such materials is the Bible. This will remain the core of religious curriculum content. But not all parts of the Bible are of equal value for the teaching of religion. Selection-inclusion, exclusion, gradation—is required." One of the fundamental principles by which such selection is to be made is the test of pupil comprehension or understanding of a passage. Dr. Betts further comments (1, p. 325), "The subject matter that would be beyond the grasp of the child if offered him as part of his education in the public school will equally be beyond his grasp if offered by the church school. Difficult vocabulary, uninteresting literary form, complicated phrasings which would baffle the interest and benumb the brain of the pupil in his week-day work will produce the same result in his Sunday work." Curriculum materials must fit the child.

Some testing of children has been done in connection with the religious curriculum. In the Indiana Survey of Religious Education, Vol 2, Giles, Chassel and Chassel, and Whitley discuss the testing program that was initiated by that project, a program concerned primarily to measure results of instruction and training already given rather than to prepare for needed improve-

ment.[1] Other tests of religious and Biblical information are available, the Laycock, the Northwestern Series A, 1, 2, and 3, and others.

Testing of Biblical materials and text books has been done by score cards prepared by various agencies, the Indiana Survey, the International Lesson Committee, and the Department of Religious Education, Northwestern University, but such testing has been by adult judgment upon those materials.

Comprehension tests upon Biblical materials have been prepared for use with children. Dr. S. P. Franklin dealt with selected precepts and parables of Jesus in a pioneer attempt to ascertain when adequate comprehension of those materials begins in children. On the basis of his findings, guidance is at hand for the proper placement of these materials in the curriculum. Since his work, a series of tests has been prepared to cover pupil comprehension of the entire Bible, one on the Old Testament and two on the New Testament, but these are not extensive enough to provide much guidance for the builder of the curriculum.[2]

It is the purpose of this study to determine the proper placement of materials from the Old Testament prophets by ascertaining when adequate comprehension of these materials begins in children. Thirty-five quotations from nine prophets are used in various arrangements whereby children of different age-levels are asked to record their judgments as to the true meaning of each passage. General facts as to the comprehension of the prophetic materials as a whole and specific information as to individual passages are thus available. These findings can serve as guide-posts in the work of adapting and adjusting prophetic materials to the needs and capacities of children.

The report of this study will use the following plan. Chapter II will describe the tests used and the administration of them. Chapter III will deal with the comprehension of the materials by children of mental ages eight to sixteen inclusive, with the factors of sex, socio-economic status, and religious training involved. Chapter IV will consider the placement of the passages studied according to the degree of comprehension by the series of mental ages. Chapter V will summarize briefly the conclusions of the study.

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[1] Chapters XIV, XVI, and XVII

[2] Northwestern Series of Religious Education Tests, Series B, No. 4, 5, and 6. Northwestern University, Evanston, 1929.

CHAPTER II

THE PREPARATION AND ADMINISTRATION OF THE COMPREHENSION TEST

The materials of the study were obtained from the answers of school children to a comprehension test using selected quotations of the Old Testament prophets. It is the purpose of this chapter to describe this test and tell of its use. A printed copy is found in Appendix A.

THE COMPREHENSION TEST

In the preparation of this test, some fifty passages of prophetic materials were selected from children's Bibles and texts of prophetic materials for children and youth.[1] Some of them were brief, single statements of prophetic teaching; others were longer passages. Since only a limited number could be used in a practicable test, necessity cut the list to twenty-seven shorter quotations and eight longer.[2] It was the purpose to select simple or familiar or commonly used materials. Examples of these selections follow, four of them short statements, the last longer.

> The son shall not bear the sin of the father, neither shall the father bear the sin of the son; the soul that sinneth, it shall die.
>
> You shall seek me and find me when you shall seek me with all your heart.
>
> They that wait upon the Lord shall renew their strength, they shall run and not be weary, they shall walk and not faint.
>
> Seek good and not evil, that you may live.
>
> With what shall I come before the Lord and bow myself down before Him? Shall I bring Him burnt offerings, calves a year old? Will He be pleased with thousands of rams, or with ten thousands of rivers of oil? Shall I give my first born, my son, for my sin? He hath showed thee, O man, what is good; and what doth God require of thee, but to do justly, and to love mercy, and to walk humbly with thy God?

The test has three parts. Parts I and III deal with the shorter quotations. In Part I the quotation is stated, then follow three statements of explanation, one of which is designed to repeat closely the thought of the quotation. The pupil is instructed to mark

[1] See Appendix B for list of these books.

[2] See Appendix C for list of the passages used.

with a cross the statement that best explains the quotation. Thus the responses of the first example above are:

..... 1. God watches sinners closely.
..... 2. What we do does not harm others.
..... 3. A sinner shall pay for his own sin.

In Part III a slightly different form of the multiple-choice response is used. Here each quotation is followed by a statement of explanation that has three endings, one of which best fits the meaning of the quotation. Again the pupil is asked to indicate his choice of the right answer by checking the proper ending.

As an example the arrangement of Part III for the passage just cited in connection with Part I is this:

	.....	carries its own penalty.
Wrong-doing	.....	causes the children to suffer.
	.....	ought not to bother the father who sins.

Part II is composed of two sections of longer passages. In Section A there are four passages, each followed by several questions to be answered by underlining YES or NO, as the pupil may decide. Thus, following the "Vision of Peace" passage from Micah 4, one of the questions is: Does this passage mean that trusting in God's ways will lead nations and peoples into wars? .....YES NO Section B also contains four passages, though for these the multiple-choice type of response is again employed. Statements based upon the passage but with three alternative endings follow each passage. Pupils are asked as before to check the proper answer. The number of answers in each of the three parts is twenty-seven, or a total of eighty-one items for the whole test.

In the selection and elimination of passages to be used, and in the construction of answers and questions, the writer was favored with the helpful criticism and judgment of a seminar in Character Education and of senior college and graduate students in Philosophy and Religion, in all some forty or forty-five persons. A series of criticisms shaped and reshaped the materials until it seemed that the test was ready for a trial with children. About fifty children from the fourth through the twelfth grade made response to mimeographed copies of the test. On the basis of these returns, further revision and criticism brought the test to an approved final form in which it was printed. In the printing, particular care was taken to have the type of adequate size so as to be easily read by all pupils.

The language of the test was kept as simple as possible and within the vocabulary range of fourth grade pupils. The vocabulary was checked with the Thorndike Word Book (7), and with but few exceptions, the words used in the test lie in the first thirty-five hundred words of this list. In a few passages, the form and order of words were somewhat changed, and in others, words of explanation were placed in parenthesis, as: For they (sinful Israel) have sown the wind and they shall reap the whirlwind.

Special concern was had for certain supplemental data in addition to name, age, sex, school grade, and city. A series of questions was prepared for the front page of the test to find out the Sunday School and Church membership and attendance of the pupil, his mother, and his father. The facts of membership were to be checked, and regular, half-time, occasional, or no attendance indicated. Thus an insight is afforded into the child's general training and home background in religion, which may have a bearing on the comprehension of these materials.

The copy of the test in Appendix A will supplement this description.

THE SUPPLEMENTAL TESTS

In addition to the Comprehension Test, two standardized tests were used, both commercially available. These are:

a. The Otis Self-Administering Tests of Mental Ability, Intermediate Examination Form A for grades four to nine, and Higher Examination Form A for grades nine and up. Only a few intelligence scores were available in the schools visited, consequently Otis tests were given to practically all children tested. This particular selection was made because of its wide use, and the simplicity and ease of administration and scoring. The reliability of the tests is stated as .921 for the Higher and .948 for the Intermediate.

b. The Sims Score Card for Socio-Economic Status, Form C. This instrument is devised to obtain the socio-economic background of an individual by a series of twenty-three simple, direct questions as to family history, home conveniences and luxuries, social activities, and the occupation of the father. The score card has been widely tested and seems to give a reliable general estimate of the pupil's home background.

TESTING PROGRAM

The tests were given during the last two weeks of April and the first week of May in 1929. The cities of Davenport, Marion, Wash-

ington, and West Liberty, all in Iowa, were selected as the fields for testing, in order to include the agricultural and county-seat type of community and also the industrial center. In Davenport, about 900 pupils in the junior and senior high schools were tested and the pupils of grades four to six in two ward buildings that represented the richer and the poorer sections of the city as nearly as possible. In the other three cities, all pupils from grades four to twelve were used.

In all of the schools except those of Marion, the tester was in direct charge, either administering the tests himself or immediately supervising them. At Marion, however, it was possible to undertake the program only on the condition that the teachers, under the direct supervision of Superintendent C. B. Vernon, administer the tests, fitting them into the program of the school as was best possible. The active, interested coöperation of Mr. Vernon is clearly evidenced in the results that were obtained at Marion. It is clear that the program of testing was carefully directed by teachers and thoughtfully received by pupils. Inasmuch as the tests were all "self-administering", with special, complete directions furnished the teachers in addition to those printed on the test, the results at Marion seem equally reliable with those obtained elsewhere.

Since the Comprehension Test was too long for one session in the lower grades, instructions stipulated that the test should be given on two occasions, Part I and Part II Section A at one sitting, and Part II Section B and Part III at another. This provision tended to guard against the fatigue element for the younger pupils. The junior high school schedule necessitated the taking of the test at one sitting by pupils from grades seven and up, requiring approximately fifty minutes for all three parts. For grades four to six, instructions stated that the examiner should read aloud the passages of Part II so that the pupil might more clearly understand the quotations.

SCORING OF THE TESTS

The tests were scored on the basis of the percentage of right responses to the total items of the test. These scores with the supplemental data on intelligence, socio-economic status, sex, and religious training provide the basic materials upon which the following chapters are developed.

In connection with the use of the Sunday School and Church records, samples of the materials at West Liberty and Washington

were reviewed by three ministers in order to determine whether the questions had been accurately answered. Further, from the records of brothers and sisters as listed on the Sims Score Cards, comparison was made of the returns of a number of scattered cases in Marion and Davenport. Both checks indicated that reasonably accurate replies to questions had been made.

CHAPTER III

COMPREHENSION AND RELATED FACTORS

This chapter deals with the results made available by giving the test described in Chapter II to approximately 3000 school children in representative communities of Iowa. The chief interest lies in the amount or degree of comprehension by children of the materials presented in the test. Paralleling this interest is the problem of how reliably the test provides the data upon which determination of the degree of comprehension is based. Further, various factors enter into the comprehension problem—intelligence, sex, home or social background, and religious training.

NUMBER OF CASES

For the final summaries of this chapter, returns from 2655 cases (1220 boys and 1435 girls) were available, partial or incomplete data throwing out other cases. For purposes of classification, mental age was used rather than school grade or chronological age as a better criterion of grouping. Through the intelligence scores obtained in the testing program, the mental age of each pupil tested was determined. In Table 1 is a classification of all cases used on this basis.

Table 1

Classification of 2655 Individuals according to Mental Ages[1]

	Mental Ages*								
	8	9	10	11	12	13	14	15	16
Boys	44	62	87	96	170	122	164	164	311
Girls	25	70	108	80	165	147	194	222	424
Total	69	132	195	176	335	269	358	386	735

[1] The larger number in the higher mental age levels is due to the unusual opportunity that developed of testing senior high schools in the cities visited.

* Throughout this study mental age 8 is taken to include mental ages up to 8 years 11 months; mental age 9 thus includes all individuals from 9 years to 9 years 11 months, and so on up to mental age 16 which includes all whose mental age is 16 or above.

COMPREHENSION AND MENTAL AGE

In this section of the study it is the aim to consider the degree of comprehension with reference to the factor of mental age, using the

percentage of all individuals of a given mental age who comprehend a given item as an index of comprehension. The presentation will show first the degree of comprehension by individual items, then the summaries for the three parts and for the entire test. A series of tables will present the material as simply as possible. An instance of the method to be used is this. Item 1 of Table 2 is the quotation, "God's thoughts are not our thoughts, neither are his ways our ways." The percentages of comprehension for it from mental ages eight to sixteen inclusive read: 55 at mental age eight, 47 at nine, 67 at ten, 77 at eleven, 79 at twelve, 88 at thirteen, 89 at fourteen, 91 at fifteen, and 92 at sixteen. In examining the tables, it should be noted that there is a rather steady increase from year-to-year without consistent periods of sharp rises in comprehension.

Taking up first the percentages of individual items, we shall consider the summaries for Part I, then for Part III, these two parts making use of the same short quotations.

The results for Part I are shown in Table 2. At the left of the page the twenty-seven items are listed by number. Then by mental age columns the average percentage of correct response for each item is listed, as was just illustrated by item 1. Likewise for item 9, "Woe to those that are wise in their own eyes and intelligent in their own sight," the percentage for mental age eight is 16, for mental age nine 20, for mental age ten 25, and so on to mental age sixteen at 85. The percentages of mental age eight vary from 16 to 68 and of mental age sixteen from 76 to 99. In most instances there is an increase in the adjacent higher mental age, with the curve of increase rising rather consistently from step to step. In mental age sixteen there are only two items ranking below 80, as compared to ten for mental age fifteen and fifteen for mental age fourteen and twenty for mental age thirteen. Only five items have an average percentage for mental ages fifteen and sixteen less than 80, and two of the five are above 75. In examining the four most difficult items (9, 14, 19, and 25) for the mental age eight, we find that the same items rank 85 or better for mental age sixteen, indicating comprehension of a much more adequate nature.[1] The difficulty evident in the earlier levels may be the use of the third person in the indirect style of the prophetic injunctions.

A similar analysis of Part III is to be found in Table 3, again

[1] In Appendix D is to be found a Table of the average percentages for all mental ages of the items.

showing the average percentages of right responses for each mental age for each item. For item 9, (referred to on page 15) the average for mental age eight is 43, for mental age nine 59, for mental age ten 70, on to mental age sixteen at 98. This summary shows the same type of increase as Part I, though the level begins and continues a number of points higher in Part III. So for item 14, "For

Table 2

Average Percentage of Right Answers for all Items of Part I, for Pupils of each Mental Age

Items	Mental Ages*								
	8	9	10	11	12	13	14	15	16
1	55	47	67	77	79	88	89	91	92
2	42	58	61	60	71	73	76	90	93
3	52	65	68	82	88	91	88	93	95
4	38	27	33	47	55	59	68	69	77
5	68	54	64	68	72	75	75	87	90
6	46	47	61	71	75	82	88	93	96
7	48	42	63	57	63	59	67	70	76
8	29	33	43	50	56	68	77	82	92
9	16	20	25	39	44	48	63	74	85
10	43	44	64	78	79	84	87	94	96
11	17	18	25	38	41	55	68	82	92
12	52	55	63	69	75	78	87	91	94
13	25	30	28	35	50	47	55	67	88
14	28	34	37	51	53	57	71	80	98
15	43	47	69	69	77	85	86	94	98
16	42	45	50	52	55	61	65	71	80
17	43	23	27	26	29	40	44	54	80
18	33	24	45	57	61	58	65	78	88
19	30	39	42	55	64	67	76	78	99
20	52	61	71	88	92	95	96	98	90
21	36	40	46	60	70	74	81	82	87
22	35	39	38	58	47	49	52	72	92
23	52	57	54	68	77	80	85	88	94
24	28	41	58	60	75	75	87	89	90
25	12	22	18	29	44	59	66	86	86
26	54	38	42	47	55	59	70	74	91
27	41	42	56	64	72	67	81	84	80

* See note to Table 1 for limits of each Mental Age as understood throughout this investigation.

they (sinful Israel) have sown the wind and they shall reap the whirlwind," which is equally difficult in both arrangements in the lower levels and quite readily understood at the higher levels. So for items 2, 3, 5, 6, 8, 10 and on throughout the lists. In other in-

stances, the answers of the two parts are easy in one instance and difficult in the other. Item 1, "My thoughts are not your thoughts, neither are your ways my ways, saith the Lord," shows quite a variance in the results of Parts I and III, from 55 at mental age eight to 92 at mental age sixteen in Part I, and from 4 at mental age eight rising slowly to only 45 at mental age sixteen. This suggests that either there was an over-hasty consideration of Part III by pupils or that the test questions provided too difficult choices. It further demonstrates that the change of response required will change the factors involved in the "understanding" of a passage and therefore may alter the apparent difficulty of one and the same passage. In items 7, 13, and 16 there seems to be consistent diffi-

Table 3

Average Percentage of Right Answers for all Items of Part III

Items	Mental Ages								
	8	9	10	11	12	13	14	15	16
1	4	12	11	15	14	22	24	32	45
2	55	49	67	72	73	73	76	82	88
3	17	20	36	55	76	80	93	97	98
4	74	78	79	78	85	85	91	95	98
5	51	52	51	60	64	72	75	84	94
6	16	12	20	25	50	63	77	87	94
7	20	20	19	22	27	37	34	39	51
8	30	29	33	39	47	59	74	79	95
9	43	59	70	78	80	79	91	95	98
10	28	25	58	57	75	77	89	89	96
11	30	39	50	52	67	80	84	91	95
12	64	62	65	78	90	90	95	92	99
13	39	47	46	49	45	49	47	50	64
14	26	32	43	58	70	78	86	92	98
15	30	31	40	44	50	64	64	75	84
16	45	41	50	41	36	38	41	49	69
17	51	45	50	61	69	80	82	90	94
18	36	45	53	58	70	78	88	92	96
19	30	23	26	30	37	48	55	75	90
20	39	47	55	56	71	74	81	86	90
21	49	52	63	74	82	83	90	94	94
22	41	47	46	56	59	70	78	85	92
23	33	46	49	43	62	64	68	78	88
24	38	39	46	56	65	81	86	88	92
25	38	55	63	73	84	91	92	95	98
26	41	43	43	48	59	64	80	88	96
27	28	35	39	40	47	44	44	62	73

culty in both parts, indicating the difficulty of the passages though there is increasing comprehension through the series of groups.

There is the same general trend of increase in the right responses as a group, as was true for Part I, a gradual increase from level to level. The percentages of mental age eight have a range from 4 to 74, while in mental age sixteen only five items are below 80 with the range for all items 45 to 98. In mental age fifteen, nine items are below 80; in mental age fourteen, thirteen; and in mental age thirteen, nineteen.

For the longer passages of Part II, the tabulation of results is shown in Table 4. There are 27 items in this part of the test also. The grouping of questions about passages is indicated by the lines drawn after items 4, 8, 12, 18 and so on, the items included between one line and the next bearing upon the same passage. The range of correct response in mental age eight is from 16 to 86, while for mental age sixteen only four percentages are below 80, seven below 80 for mental age fifteen, fourteen for mental age fourteen, and fourteen for mental age thirteen.

To show the results of Part II by comprehension of passages as a whole, Table 5 is obtained by finding the average percentage of right answers for each of the four questions on passage 1 for each mental age, then similarly the averages of the four questions on passage 2, and so on. These results seem to show that the longer passages are easier of comprehension than the shorter. For the eight passages, the range for mental age eight is from 17 to 66 while the totals for mental age sixteen vary from 77 to 99, with only one percentage below 80. For mental age fifteen only one percentage falls below 80, five fall below for mental age fourteen, five for mental age thirteen, and six for mental age twelve. The most difficult passage for the earlier mental ages is the conditional passage, Section B 2, from Jeremiah. However, there is quite adequate understanding at fifteen and sixteen, with percentages of 81 and 89. The lowest of the eight passages as a whole, Section B 3, contains symbolic, figurative language, quite typically Oriental, and seems to be confusing throughout the series of mental ages, though there is a gradual rise in comprehension of it from mental age eight on. A graphic representation of the results of Table 5 is to be found in Graphs 1 and 2.

The results of Parts I, II, and III which have been considered item by item are summarized by parts and for the whole test in

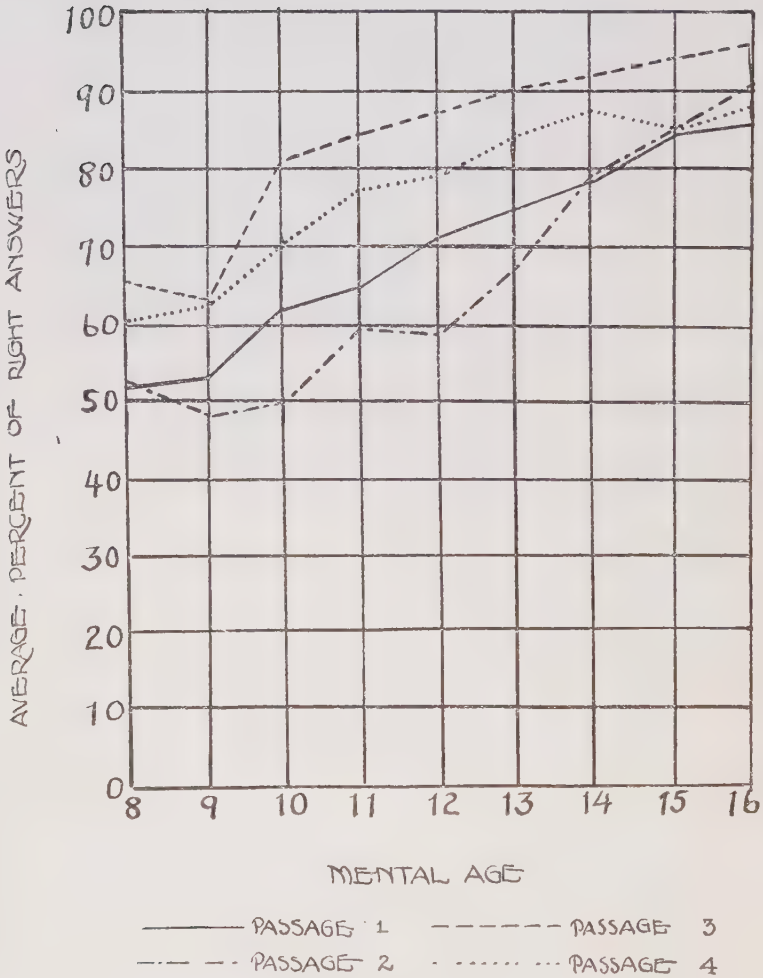
Table 4

Average Percentage of Right Answers for All Items of Part II

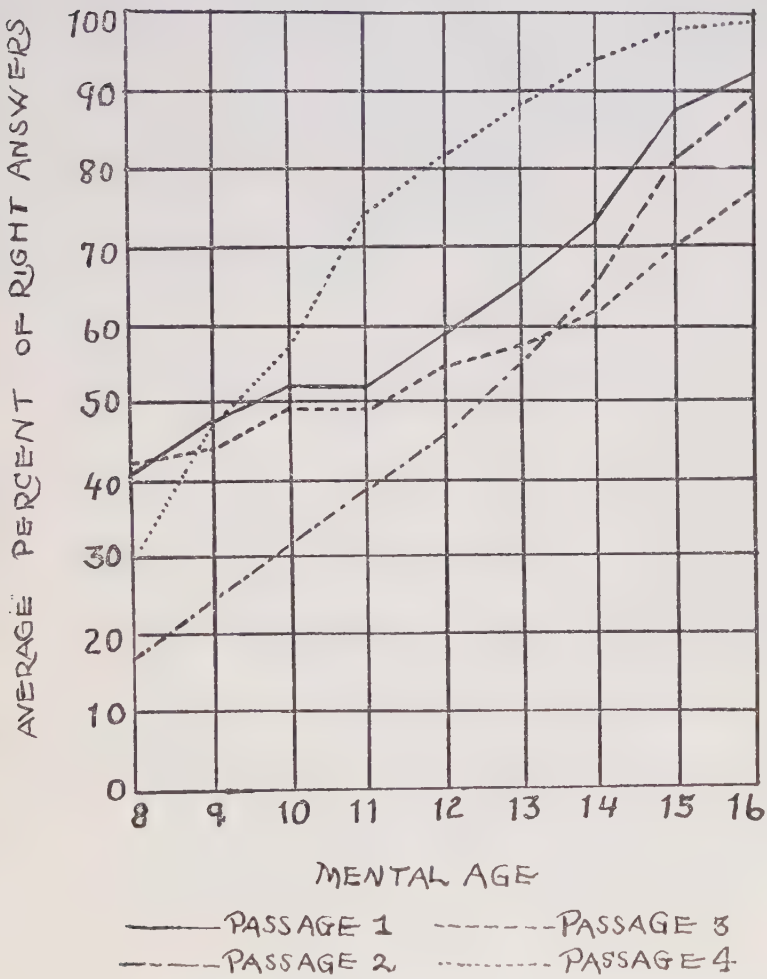
Items	Mental Ages								
	8	9	10	11	12	13	14	15	16
1	58	61	80	85	89	91	95	95	98
2	45	46	47	57	65	71	72	78	81
3	51	46	47	43	56	62	69	80	74
4	54	60	74	74	72	74	77	83	87
5	43	33	33	45	54	58	68	78	84
6	51	50	48	56	59	58	75	76	85
7	46	46	52	58	62	68	78	92	96
8	68	61	71	80	84	82	93	94	98
9	78	88	94	92	90	87	89	92	95
10	52	54	69	74	79	86	85	87	93
11	65	67	89	91	92	94	98	99	99
12	68	67	73	79	87	93	94	98	98
13	55	61	73	78	82	87	91	90	94
14	61	60	79	80	86	90	92	92	97
15	52	50	68	85	84	89	93	95	97
16	86	83	77	81	81	85	91	89	92
17	68	70	70	82	89	92	95	97	98
18	41	55	52	56	52	58	59	49	50
19	30	34	41	43	56	65	74	85	90
20	51	60	62	60	61	64	71	89	93
21	16	28	32	38	48	57	68	78	89
22	17	20	32	39	44	53	62	83	88
23	62	58	61	65	64	68	70	78	89
24	23	20	25	18	24	26	36	53	64
25	45	52	53	51	56	52	54	59	61
26	43	46	56	61	77	81	87	91	95
27	30	47	57	74	82	88	94	98	99

Table 6. This table exhibits the averages of the total items of each mental age for each part, and then the averages of the mental age percentages of the three parts for the total test. The facts are presented also in Graph 3.

It is clearly evident that there is a steady increase in comprehension for the test as a whole and for each part, from mental age eight through mental age sixteen. The only step where there is no



Graph 1
Average Percentage of Right Answers to the Passages of Section A, Part II, by Mental Ages



Graph 2

Average Percentage of Right Answers to the Passages of Section B, Part II, by Mental Ages

Table 5

Average Percentage of Right Answers to the Eight Longer Passages of Part II

	Mental Ages								
	8	9	10	11	12	13	14	15	16
Section A									
1	52	53	62	65	71	75	78	84	85
2	53	48	50	60	59	67	79	85	91
3	66	64	81	84	87	90	92	94	96
4	61	63	70	77	79	84	87	85	88
Section B									
1	41	47	52	52	59	65	73	87	92
2	17	24	32	39	46	55	65	81	89
3	43	44	49	49	55	57	62	70	77
4	30	47	57	74	82	88	94	98	99

Table 6

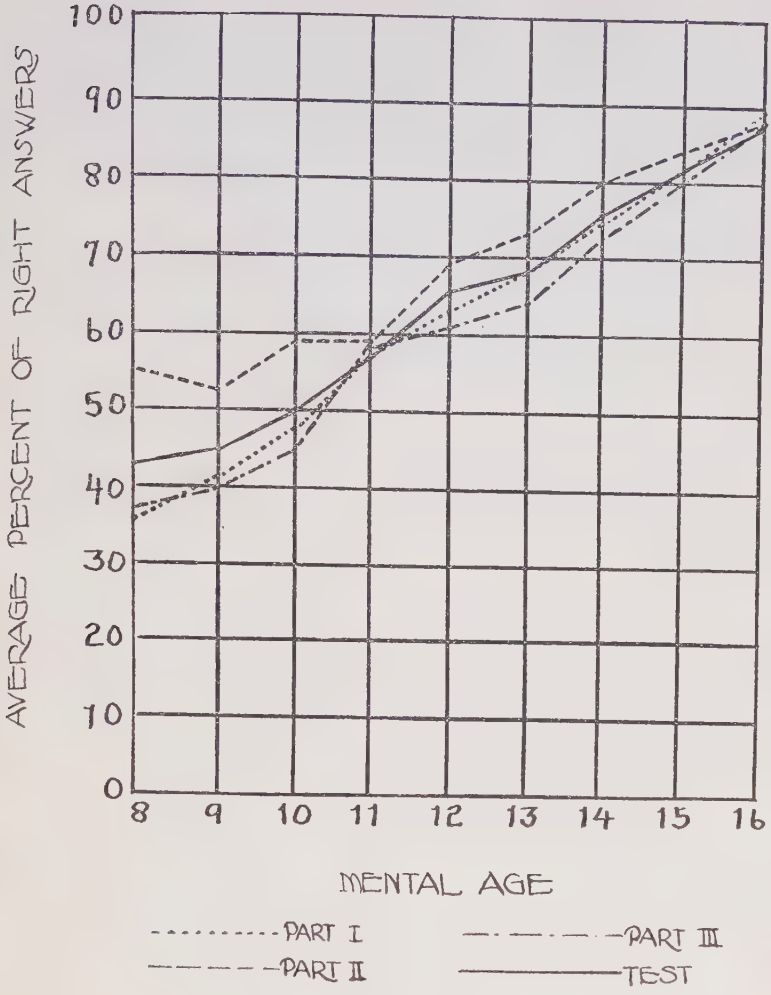
Average Percentage of Correct Answers for Parts I, II, and III and the Test as a Whole

Parts	Mental Ages								
	8	9	10	11	12	13	14	15	16
I	36	41	47	57	63	68	74	82	89
II	55	53	59	59	69	73	80	84	88
III	37	40	45	59	61	64	73	80	88
TEST	43	45	50	58	65	68	76	82	88

increase is the ten-eleven mental age sequence of Part II, which remains constant at 59.

In summarizing the general comprehension by mental ages, the fact evident in Table 6 and Graph 3 is to be noted, particularly that the increase of comprehension rises slowly and steadily from mental age to mental age with no specially marked increments at any stage. The curve begins at 43 in mental age eight and rises to 88 in mental age sixteen, with the following increases in the mean scores from age level to age level: 2-5-8-7-3-8-6-6. The materials presented by the test seem to be comprehended more easily at each succeeding mental age with a 75 per cent comprehension attained at mental age fourteen. It would seem therefore that the bulk of the prophetic materials dealt with in this test belong to the later mental ages of the levels this study involved.

It is of note further that the longer passages were comprehended at earlier mental ages than the shorter. This may be due in part to the type of response that was used in half of the cases, in part to the fact that the longer passages have more unified and more ex-



Graph 3
Average Percentage of Correct Answers for Parts I, II, and III and the Test as a Whole

tended ideas and may make more of an impression upon those reading them.

As a final item of the general matter of comprehension, the correlation of the test with mental age is to be considered. A chance selection of 100 cases over the entire range of the test gave a correlation of .871 with a PE of .0176. A later correlation of 150 random cases over the entire mental age range substantiated this result with

a correlation of .925 with a PE of .008. These correlations indicate the steadiness of the test as an instrument for use with different levels of ability. The general rise of the score from one mental age level to another, as shown by Graph 3, is further indication of the stability of the test from the standpoint of intelligence.

TRUSTWORTHINESS OF RESULTS

At this point, it is in order to consider briefly the problem of the trustworthiness of the results that have just been considered. Is there any assurance that the test which was developed and used is a reliable instrument for its purposes?

As to the validity of the test, the following facts are in order:

a. The passages were selected from Sources which are emphasizing Biblical materials for children and youth.

b. The test was subjected to thorough criticism and standardization, involving preliminary testing with children, before it was printed and used.

c. The high correlation between mental age and the test indicates that the values or ideas it is measuring are being interpreted with stable results. The steady increase in comprehension from mental age to mental age as shown by Table 6 and Chart 3 would indicate that the test measures what it purports to measure. Further, the fourteen to sixteen mental age response in practically all items of the test approaches closely the adult standard.

d. The item by item analysis does not show a large percentage of extremely easy or extremely difficult questions. There is no question completely missed even by the lowest mental age, nor is there any answered with entire success by even the highest mental age.

These facts combine to give assurance that the test somewhat adequately measures the actual comprehension of the given materials by the children tested. Comprehension and intelligence are allied and related, comprehension or understanding depending upon the intelligence of the individuals involved.

In determining the reliability of the test, the method of correlating odd answers with even answers for a chance selection over the entire mental age range of the test was used. The correlation was .882. By Brown's formula the correlation for the whole test is .937 with a PE of .008.

A second method which somewhat indirectly shows the reliability of the test is the correlation of the average percentages of the items

of each part by adjacent mental ages. Thus in Table 2 the twenty-seven percentages of mental age eight were correlated with the corresponding percentages of mental age nine, those of nine with the ten mental ages percentages, and so on for the remaining pairs of mental ages of Part I and then of Part II and III, as is possible through Tables 3 and 4. These Correlations vary from .451 to .971, with nineteen out of twenty-four at .8 or above.[2] These results indicate a steadiness in the response to the test from age to age, the same questions being relatively easy or relatively difficult for adjacent higher or lower mental ages respectively.

A third method of correlation was used with percentages of right responses for all items of Part I for each mental age paired with the same percentages for all items of Part III for the same age. These correlations range from —.338 to .409.[3] The reason that this correlation is not any higher is apparently that while the same passages were used in the two parts the sets of responses were different. The extent of correlation would depend on whether the difficulty of the two treatments was relatively the same in most instances or not. In this test, the correlations show that the difficulty of individual items was not the same. Looking at a passage from a new point of view may make it either easier to understand or more difficult. The result is that the combination of parts will serve as a more adequate test than any part singly, one part supplementing the other.

COMPREHENSION AND SEX

In the combined tests, information as to the sex of pupils was available. In order to ascertain the influence of sex on the matter of comprehension the mean and median scores of each sex were determined. Table 7 lists the median score in percentage of right answers for boys and girls responding by mental ages. Table 8 summarizes the mean percentages of right answers for boys and girls for the whole test, with the SD given in each instance. Graphs 4 and 5 summarize these two tables objectively.

From Table 8 and Graphs 4 and 5 it is evident that the girls have a slight advantage at every mental age. The real meaning of this difference is a point to be determined. A statistical treatment of

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[2] In Appendix D the complete list of correlations is to be found (Table b).

[3] In Appendix D, Table c lists the correlations in full.

Table 7

Median Scores in Percentages of Right Answers for Boys and Girls of each Mental Age

	Mental Ages								
	8	9	10	11	12	13	14	15	16
Boys	40.5	42.5	48.0	56.7	64.3	68.0	74.5	81.2	87.7
Girls	42.4	44.8	52.9	61.9	67.4	72.5	79.4	84.9	89.4

Table 8

Mean Scores in Percentages of Right Answers on the Whole Test

Mental Ages	Boys		Girls	
	Mean	S.D.	Mean	S.D.
8	41.9	7.51	43.4	11.73
9	43.7	7.70	46.2	10.11
10	48.7	9.30	53.7	12.85
11	57.1	11.05	60.4	9.76
12	64.0	11.56	65.9	11.90
13	67.7	10.96	71.15	11.09
14	73.8	10.93	77.8	8.29
15	80.4	8.43	83.4	9.10
16	87.0	6.80	88.8	5.55

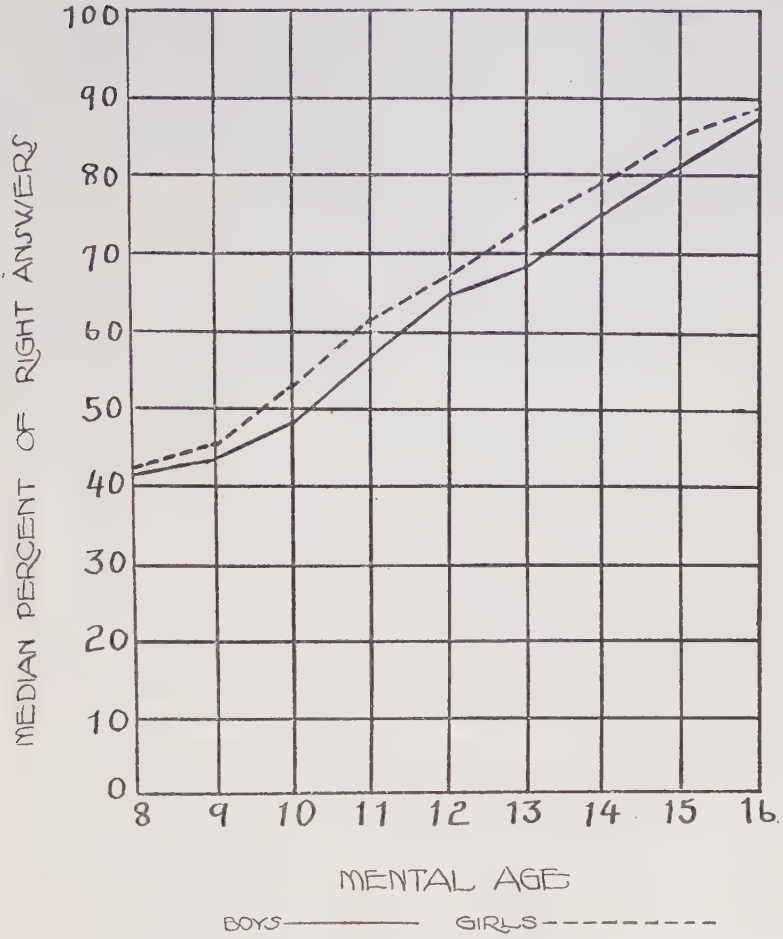
the differences between the means of the boys and girls is given in Table 9.

Table 9

A Summary of the Differences between Mean Comprehension Scores for Boys and Girls of Each Mental Age

Mental Ages	Boys		Girls		P.E. Diff.	O.D.	O.D. / P.E.Diff.
	P.E.	Mean	P.E.	Mean			
8	.764	41.86	1.528	43.44	1.757	1.57	.896
9	.660	43.74	.815	46.2	1.049	2.46	2.346
10	.673	48.68	.834	53.67	1.062	4.00	4.700
11	.761	57.09	.736	60.45	1.058	3.37	3.180
12	.598	64.03	.625	65.88	.865	1.85	2.138
13	.672	67.75	.617	71.16	.912	3.41	3.737
14	.576	73.75	.401	77.76	.702	4.01	5.714
15	.444	80.40	.412	83.36	.606	2.96	4.889
16	.260	86.96	.181	88.77	.317	1.81	6.130

This table shows "complete reliability" for the differences between boys and girls of the ten, fourteen, fifteen, and sixteen mental age levels, with quotients of 4 to 6. The results show good indica-



Graph 4
Median Scores in Percentage of Right Answers
on the Whole Test

tions of real differences for the eleven and thirteen mental age levels also. In the above levels, particularly the higher, the differences persist in a very stubborn manner, though the actual differences vary and are not large.[4] The girls have the superiority in

[4] Garrett, H. E., Statistics in Education. Longmans, 1926. "A $\frac{D}{PE(diff)}$ must be at least 4 to insure complete reliability." For 3, there are 98 (97.9) chances that the true difference will be greater than zero, and for 2, 91 chances that the true difference will be greater than zero. (pp 135-6)

every instance, though not conclusively in the eight, nine, and twelve levels.

COMPREHENSION AND SOCIO-ECONOMIC STATUS

In the testing program, the Sims Socio-Economic Score Card was used in order to determine the social background of the pupils tested. The general results indicate that a socially representative group of children was reached, for the scores vary from very low to highest, with the average score rising from 13 at mental age eight to 15 at mental age nine, 16 for mental ages ten and eleven, 18 for mental ages twelve, thirteen, and fourteen, and 20 for mental ages fifteen and twenty. These average scores lie in the range listed by the manual of instructions accompanying the Sims Score Card as "medium high to high." The increase of score as higher mental ages are reached indicates that pupils from the lower socio-economic levels have dropped, or been forced, out of school.

The wide distribution of cases is further evidenced in the Sims scores of grades four to six of the two grade schools in Davenport, one in the better residential district where the median score was 21.2, the other in the poorer section of the city, where the median was 12.1. The results from the Sims scores seem to show that a very representative distribution of cases over differing types of groups was obtained.

The problem of the relationships of social status and comprehension is another matter. In order to determine the possible effect of social status on the comprehension score, a partial correlation was used, in which the correlation between the comprehension scores and the Sims scores of 150 chance selections over the entire range of cases was determined with mental age held constant. The correlation was .0158 with a PE of .0550. From this correlation, it was very clear that Sims scores had practically no relationship with the comprehension ability of the pupils studied.

The other partial correlations of the series are of interest further. With the Sims score held constant, the correlations between comprehension scores and mental age was .9195 with a PE of .0085. This is further corroboration of the correlations referred to on page 30. The correlation of mental age with the Sims scores when the comprehension scores were held constant was .0905 with a PE of .0545. With both the comprehension scores and the mental ages, the Sims scores have no relationship according to these correlations.

COMPREHENSION AND RELIGIOUS TRAINING

On the first page of the test questions are asked relative to the Sunday school and church membership and attendance of the pupil, his mother, and his father. In each instance, the information is asked as to whether attendance is regular, half the time, occasional, or never. Practically all pupils supplied the information asked for, and with evident sincerity and truthfulness. Some check on the data was possible. In the Sims score card there is a space for listing the pupils' brothers and sisters who may be in school also. A comparison of the reports concerning Sunday school and church attendance on the part of members of the same family in the schools of Davenport and Marion seems to show that there is a high agreement in such statements, which were made without collaboration on the part of those responding. The only discrepancies were occasional evident differences in judgment as to whether a parent attended half the time or only occasionally. Other differences were the matters of personal practice, where older brothers were considerably less regular in attendance than younger brothers and sisters. Then three ministers in West Liberty and Washington checked over returns with reference to their own Sunday schools and churches. With practically no exception, there was an approval of the records of the pupils. It seems from these partial checks that reasonably reliable data are afforded in these statements.

In investigating the influence of church and Sunday school *attendance,* which was regarded as a better criterion than *membership,* the following method was followed. Since the record involved the handling of each case six times, a sampling was taken; namely, mental ages eight and nine, thirteen, and sixteen. Then for each mental age the percent of pupils, mothers, and fathers who attend Sunday school and church regularly, half the time, and occasionally or never, was determined, as is shown in Table 10. The last two points on attendance were grouped as one, since it was thought that the influence of an intermittent attendance would be of little more value than no attendance. Then in Table 11 is given the effect of the Sunday school and church attendance of the pupil, his mother, and his father on the comprehension of pupils. The average score of each group is indicated. In five of the twenty-four possibilities there is a record of better score with no attendance than with regular attendance. In seventeen instances the regular attendance scores are higher. The other two scores show

Table 10

Per cents of the Pupils of Mental Ages 8, 9, 13, and 16 and of their Mothers and Fathers Attending Sunday School and Church

	Regularly	Half the Time	Occasionally or never
Pupils			
Sunday School	60	14	26
Church	37	17	46
Mothers			
Sunday School	22	9	69
Church	31	15	54
Fathers			
Sunday School	14	7	79
Church	22	10	68

Table 11

Average Scores of Correct Answers by Mental Ages 8, 9, 13, and 16 according to Attendance of Pupils and Parents at Sunday School and Church

Regularity	Mental Ages			
Pupil: Sunday School	8	9	13	16
Regularly	42	45	60	91
Half the Time	42	45	67	86
Occasionally-Never	42	44	70	87
Pupil: Church				
Regularly	43	45	77	90
Half the Time	36	45	69	88
Occasionally-Never	42	45	69	87
Mother: Sunday School				
Regularly	46	45	69	87
Half the Time	38	47	66	88
Occasionally-Never	42	44	61	88
Mother: Church				
Regularly	42	47	72	89
Half the Time	39	43	64	89
Occasionally-Never	43	44	69	87
Father: Sunday School				
Regularly	49	42	67	86
Half the Time	36	45	66	90
Occasionally-Never	41	45	70	86
Father: Church				
Regularly	43	46	70	89
Half the Time	40	44	67	89
Occasionally-Never	42	45	69	87

equal comprehension. In only two instances, both in mental age sixteen, are there sharp discrepancies between the scores of the pupils themselves. Those pupils attending Sunday school regularly have a score of 60 while pupils attending occasionally or never have a score of 70. For the same group, however, the situation is reversed for church attendance, with 77 the score for regular attendance and 69 for occasional or no attendance.

The evidence seems to be that there is little decisive effect upon comprehension by church and Sunday school attendance of the pupil or his mother and father.

From this summary of the influence of religious training on the comprehension of the teachings of the prophets it would seem that it is some factor other than religious training or background that determines the degree of understanding of these passages on the part of children. Also, the agencies and methods of religious training may be inefficient and inadequate, not able to exert a great positive influence in the lives of children.

CHAPTER IV

A SUGGESTED CURRICULAR PLACEMENT OF PROPHETIC MATERIALS

In suggesting a placement in the curriculum of the materials dealt with in the test, it was decided to adopt a 75 per cent comprehension as the criterion to decide the inclusion of a passage at any particular stage of the curriculum. This limit was arbitrarily fixed, and judgments may vary as to proper degree of comprehension for use in this way. Material ought not to be too easy for children, or there may be lack of incentive to master it. Yet it ought not to be of too high a level, or it fails to challenge continued interest and effort.

A SUGGESTED PLACEMENT BY MENTAL AGES

In the classification that follows, the materials have been listed in the first mental age in which there is 75 per cent comprehension according to the results of the preceding chapter. In locating the passages of Parts I and III, the average percentage of the two parts was used for each mental age. The term "quotation" is used in referring to the short passages of Parts I and III; for Part II, the section and number of the passage are stated.

Mental Age—8

Mental Age—9

Mental Age—10

Part II, A 3 Vision of Peace, Micah 4:1-3

Mental Age—11

Part II, A 4 Warnings against Boasting, Jeremiah 9:23-24

Mental Age—12

Quotation 3: The son shall not bear the sin of the father, neither shall the father bear the sin of the son; the soul that sinneth it shall die, Ezekiel 18:20.

Quotation 12: They that wait upon the Lord shall renew their strength, they shall run and not be weary, they shall walk and not faint, Isaiah 40:31.

Part II, B 4: Condemnation of Pride, Isaiah 3:16-23.

Mental Age—13

Quotation 10: You shall seek me and find me when you shall seek me with all your heart. Jeremiah 29:13.

Quotation 24: He that gets riches unjustly shall leave them in the midst of his days, Jeremiah 17:11.

Part II, A 1: Formalism and True Religion, Amos 3:21-24.

Mental Age—14

Quotation 2: I will heal their mistakes, I will love them freely, for mine anger is turned away from them, saith the Lord, Hosea 14:4.

Quotation 5: Not by arms nor by force, but by my spirit, saith the Lord, Zechariah 4:6.

Quotation 6: Cease to do evil; learn to do well; seek justice, defend the rights of the fatherless, plead for the widow, Isaiah, 1:17.

Quotation 20: The silver and the gold are mine, saith the Lord, Haggai 2:8.

Quotation 21: Wash you, make you clean; put away the evil of your doings from before mine eyes, Isaiah 1:16.

Part II, A 2: An appeal to the Needy, Isaiah 55:6-7.

Mental Age—15

Quotation 8: The work of righteousness shall be peace and the effect of justice, quietness and confidence, Isaiah 32:17.

Quotation 11: When the Ethiopian can change his skin and the leopard his spots, then the man used to evil deeds may do good, Jeremiah 13:23.

Quotation 14: For they have sown the wind and they shall reap the whirlwind, Hosea 8:6.

Quotation 15: For I delight in mercy not sacrifice, and in the knowledge of God rather than burnt offerings, Hosea 6:6.

Quotation 18: Woe to him that builds his house by unrighteousness and makes his neighbor work without pay, Jeremiah 22:13.

Quotation 19: Woe to those who join house to house, who add field to field until there is no room left, Isaiah 5:8.

Quotation 23: The grass withers, the flower fades, but the word of God shall stand forever, Isaiah 40:8.

Quotation 25: Thou wilt keep him in perfect peace, whose mind is stayed on thee, Isaiah 26:3.

Part II, B 1: True Religion, Micah 6:6-8.

Part II, B 2; The Reward of Just Living, Jeremiah 7:5-7.

Mental Age—16

Quotation 4: Who is a God like unto thee, that pardons sin, holding not his anger forever, because he delights in kindness, Micah 7:18.

Quotation 9: Woe to those that are wise in their own eyes and intelligent in their own sight, Isaiah 5:21.

Quotation 17: It is a rebellious people who say, Speak to us agreeable words, give us false visions, Isaiah 30:9-10.

Quotation 22: Out of their silver and gold they have made idols to their destruction, Hosea 8:4.

Quotation 26: O Israel, return unto the Lord thy God, for thou hast fallen by thy sins, Hosea 14:1.

Part II, B 3: The Evil of Changed Gods, Jeremiah 2:11-13.

Consideration of Omitted Passages

The above summarization has not included the following five quotations:

1: My thoughts are not your thoughts, neither are your ways my ways, saith the Lord, Isaiah 55:8.

7: Seek the welfare of the city where you have been taken as captives, for in its peace you shall have peace, Jeremiah 29:7.

13: Since I have known only you of all the families of the earth, I will punish you for all your sins, Amos 3:2.

16: Woe to him that says to an idol of wood, Awake, or to the dumb stone, Arise and teach, Habakkuk, 2:19.

27: Seek good and not evil, that you may live, Amos 5:14.

In considering the degree of comprehension of these passages, the question arises as to whether the difficulty of understanding was equal in Parts I and III. In Table 12 is given the average percentage of right answers for these quotations for mental ages fifteen and sixteen for both parts of the test in which they occur.

Table 12

Average Percentages of Right Answers to Items 1, 7, 13, 16, 27 for Mental Ages Fifteen and Sixteen.

Items	Part I	Part III
1	92	39
7	73	45
13	78	57
16	76	59
27	82	68

When an item fails to attain at the fifteen-sixteen mental age levels 80 per cent of the adult standard for both parts, it seems to be evidence of too difficult material or of faulty test construction. In instances such as 7, 13, and 16, it would seem that the passages are ruled out of consideration for the purposes of this study.

In the other instance where the answer of one part is easily comprehended, and the answer of the same quotation in the other part difficult, it is probable that the difficult arrangement is too difficult rather than that the easy arrangement is too easy. If we disregard this possibility, however, and place the quotation on the basis of one part at an 80 per cent comprehension instead of 75, we can include quotations 1 and 27. In this arrangement, we may

Table 13

Summary of the Curricular Placements of Chapter IV

Passage	Mental Age								
Parts I-III	8	9	10	11	12	13	14	15	16
1						X*	X*	X*	X*
2							X	X	X
3					X	X	X	X	X
4									X
5							X	X	X
6							X	X	X
8								X	X
9									X
10						X	X	X	X
11								X	X
12					X	X	X	X	X
14								X	X
15								X	X
17									X
18								X	X
19								X	X
20							X	X	X
21							X	X	X
22									X
23								X	X
24						X	X	X	X
25								X	X
26									X
27							X*	X*	X
Part II									
Section A									
1						X	X	X	X
2							X	X	X
3			X	X	X	X	X	X	X
4				X	X	X	X	X	X
Section B									
1								X	X
2								X	X
3									X
4					X	X	X	X	X

X = adequate comprehension of 75 per cent or better

X* = adequate comprehension of 80 per cent or better for Part I

tentatively place quotation 1 in mental age thirteen and quotation 27 in mental age 14.

SUMMARY

In reviewing the suggested placements of this chapter, we note the concentration of materials in the last three mental ages, shown

by Table 13. However, a word of caution against interpreting this placement in too final a way is necessary. Seventy-five per cent was established as an arbitrary limit of adequate comprehension for the placement of the materials in question because some such limit was required. It is recognized that there is no sharp dividing line between 75 per cent comprehension and 68 per cent. The field of understanding will extend somewhat below and somewhat above the definite point at which comprehension is fixed. Some such guidance in the initial use of materials is important, but it must be recognized that the point is arbitrary to an extent and that factors involved in the presentation of materials in the curriculum have a bearing on comprehension also.

Further, it is recognized that the results of Chapter III do not warrant the assumption that the exact meaning of the prophetic utterances in question was comprehended by the children who took the test. As in any comprehension test, the test responses lie between the pupil and the material involved, and to an extent comprehension, and increase in comprehension, apply to the test as well as to the materials used. However, the safeguard of careful criticism and standardization by competent adult critics was utilized in the preparation of the test and in the administration of the tests the direction was emphatic that pupils should choose the best response only after a careful reading of the passage in every instance. It would seem then that the results of Chapter III provide some direct insight concerning the teachings of the prophets as school children have understood them.

CHAPTER V

SUMMARY AND CONCLUSIONS

SUMMARY

This study is based upon the data available in tests given to 2655 school children from grades four to twelve inclusive in four representative communities in Iowa. The purpose was to ascertain how well they understood selected quotations of the Old Testament prophets. The tests were prepared under the careful disciplining of cultivated adult critics, whose interested coöperation helped to shape the test into a dependable instrument. The testing program was under close supervision and the results seem to be trustworthy.

The reliability of the test by the correlation of odds with evens amounts to .937 with a PE of .008. This fact indicates that consistent results ought to be gained in the use of the test. There is further a high correlation between mental age and the comprehension scores, .925 with a PE of .008. The correlation of the average percentages of the items of each part between adjacent mental ages is .8 and above in nineteen out of twenty-four possibilities, a further indication of the steadiness of the operation of the test.

The results were summarized by mental ages to show the general comprehension of the test materials. Further consideration was given to sex, socio-economic status, and religious training as possible factors in comprehension. On the basis of the general comprehension of materials, a suggested placement of the passages used was outlined by mental ages.

CONCLUSIONS

Conclusions may be briefly stated as follows:

1. The general rise of comprehension is steady from mental age to mental age for the test as a whole, with no sharp rises or sudden increments at any stage. The curve of comprehension is slow and constant, starting at 42 at mental age eight and rising to 88 at mental age sixteen. These results differ from the findings of Dr. S. P. Franklin relative to the comprehension of the precepts and parables of Jesus, in that he found a rapid increase in comprehension between mental ages eleven and thirteen.

2. The average scores of boys and girls indicate a slightly superior comprehension on the part of girls at every mental age level. Statistically these differences proved to be decidedly real for mental ages ten, fourteen, fifteen, and sixteen, with good indications of reliability for mental ages eleven and thirteen. These differences, though stubborn and real, are not extremely large.

3. The factor of socio-economic status has no relationship with comprehension. A partial correlation of the comprehension scores with the Sims Socio-economic scores, holding mental age constant, is .0158, with a PE of .055.

4. The factor of socio-economic status has no relationship with mental age, the partial correlation of Sims scores and mental age with the comprehension scores held constant proving to be .0905 with a PE of .054.

5. The factor of religious training has no particular effect, the average comprehension scores of those with religious training and those lacking it showing slight and indecisive variations both for and against religious training.

6. The general degree of comprehension by the various mental ages suggests the placement of the materials used in the test in mental age fourteen and later. It does not seem that there is adequate comprehension at earlier levels. The danger is apparent that the materials can easily be placed at too early an age level.

7. Due to the difficulty of the materials, an inference of educational import is in order. Ample supplemental provision is required to help comprehension and understanding in every way possible.

8. It is recognized that this study is concerned with only a small portion of the Old Testament prophetic materials. While results ought not be pressed too far, there would seem to be evident an indication of the difficulty of prophetic materials as a whole that should make us cautious about placing them at too early a level.

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APPENDIX A

A COMPREHENSION TEST ON THE TEACHINGS OF THE PROPHETS

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Prepared by R. T. Case

INSTITUTE OF CHARACTER RESEARCH
STATE UNIVERSITY OF IOWA
Dr. Edwin D. Starbuck, Director

Name..... ..... Sex..... Age, year..... month.....
First name Last name
City..... School..... Grade.....

Do you attend Sunday School? Regularly..... half the time.....
once in a while..... never.....? Name of school.....
Are you a church member?..... Do you attend regularly..... half the time.....
once in a while..... never.....? Name of church.....
Does your mother attend Sunday School? Regularly..... half the time.....
once in a while..... never.....? Name of school.....
Is your mother a church member?..... Does she attend regularly..... half
the time..... once in a while..... never.....? Name of church.....
Does your father attend Sunday School? Regularly..... half the time.....
once in a while..... never.....? Name of school.....
Is your father a church member?..... Does he attend regularly..... half the
time..... once in a while..... never.....? Name of church.....

This test is to see how well you understand some teachings of the Old Testament prophets. There are three parts. In each part read the instructions at least once and then work carefully with each quotation. You will have time to finish. FINISH EVERYTHING as you go along.

PART I

DIRECTIONS: Following each of the quotations of this part of the test are three statements of explanation. Check in each instance by X the statement that **best** explains the quotation, as

SAMPLE: **Woe to those that are at ease in Zion MEANS THAT**

.....1. God watches how men live.
.....2. Careless people don't have worries.
..X..3. To be satisfied is to be in danger.

Be careful to put your checks on the line. NOW GO AHEAD.

1. **My thoughts are not your thoughts, neither are your ways my ways, saith the Lord MEANS THAT**
   .....1. We don't see things as God does.
   .....2. Our thoughts are all wrong.
   .....3. It is hopeless to try to know God.
2. **I will heal their mistakes, I will love them freely, for mine anger is turned away from them, saith the Lord MEANS THAT**
   .....1. God never gets angry with sinners.
   .....2. God's love turns His anger to forgiveness.
   .....3. God is too easy with the sins of men.
3. **The son shall not bear the sin of the father, neither shall the father bear the sin of the son; the soul that sinneth, it shall die MEANS THAT**
   .....1. God watches sinners closely.
   .....2. What we do does not harm others.
   .....3. A sinner shall pay for his own sin.
4. **Who is a God like unto thee, that pardons sin, holding not his anger forever, because he delights in kindness MEANS THAT**
   .....1. God is so great because He is loving and just.
   .....2. God ought to be harder on men who sin.
   .....3. God is the best of all the gods.
5. **Not by arms nor by force but by my spirit, saith the Lord of hosts MEAN THAT**
   .....1. We are to let God do His own work Himself.
   .....2 Our aid can't do much good in God's plans.
   .....3. The help of God makes us able to do His purposes.
6. **Cease to do evil; learn to do well; seek justice, defend the rights of the fatherless, plead for the widow MEANS THAT**
   .....1. We are to turn from wrong to right and help others.
   .....2. To stop doing wrong will make us good.
   .....3. We must deal justly only with widows and orphans.
7. **Seek the welfare of the city where you have been taken as captives, for in its peace you shall have peace MEANS THAT**
   .....1. A captive people must look for heavy tasks.
   .....2. A captive people must work for the good of their captors.
   .....3. A captive people must forget their own country.
8. **The work of righteousness shall be peace and the effect of justice, quietness and confidence MEANS THAT**
   .....1. Good men have too much to do to rest much.
   .....2. A good man always tries to keep others from fighting.
   .....3. Right living has its own rewards.
9. **Woe to those that are wise in their own eyes and intelligent in their own sight MEANS THAT**
   .....1. Self-pride often leads to a fall.
   .....2. A man is apt to judge himself too well.
   ..... 3. We should always try to appear well before others.

10. **You shall seek me and find me when you shall seek me with all your heart MEANS THAT**
    .....1. If you find God, you deserve much praise.
    .....2. If you try with all your might, you will find God.
    .....3. God is daring us to find Him.

11. **When the Ethiopian (black man) can change his skin and the leopard his spots, then the man used to evil deeds may do good MEANS THAT**
    .....1. Evil doers don't change their ways easily.
    .....2. Good men never do evil.
    .....3. Leopards' spots are like black men's skins.

12. **They that wait upon the Lord shall renew their strength, they shall run and not be weary, they shall walk and not faint MEANS THAT**
    .....1. It pays to ask God's help in athletic contests.
    .....2. God helps us only when we ask Him to.
    .....3. With God's help we can do hard tasks.

13. **Since I (God) have known you (Israel) of all the families of the earth, I will punish you for all your sins MEANS THAT**
    .....1. God overlooks the sins of His people.
    .....2. God judges hardest the ones He knows best.
    .....3. The sinner is best off when he does not know God.

14. **For they (sinful Israel) have sown the wind and they shall reap the whirlwind MEANS THAT**
    .....1. A small wind grows into a big one.
    .....2. Small sins have great effects.
    .....3. You get more harvest than you plant.

15. **For I (God) delight in mercy, not sacrifice (gifts), and in the knowledge of God rather than burnt offerings MEANS THAT**
    .....1. It is not an easy matter to please God.
    .....2. God likes us to know His greatness.
    .....3. God prefers our good deeds to our offerings.

16. **Woe to him that says to an idol of wood, Awake, or to the dumb stone, Arise and teach MEANS THAT**
    .....1. The man expecting help from an idol is in danger.
    .....2. Idols are gods that can's reply to you.
    .....3. The teachings of idols are easy to learn.

17. **It is a rebellious people who say, Speak to us agreeable words, give us false visions (dreams, messages) MEANS THAT**
    .....1. Lies please a rebellious people.
    .....2. People who oppose God don't want to know the truth.
    .....3. Agreeable words show a peaceful attitude.

18. **Woe to him that builds his house by unrighteousness and makes his neighbor work without pay MEANS THAT**
    .....1. A man ought always help his neighbor.
    .....2. It is all right to build a house dishonestly if you can.
    .....3. The man will be unhappy who builds a house by wrong means.

19. **Woe to those who join house to house, who add field to field until there is no room left MEANS THAT**
   .....1. Selfish bargains hurt the one who makes them.
   .....2. The land owners can't take care of their large farms.
   .....3. Some poor people will have no homes.

20. **The silver and the gold are mine, saith the Lord MEANS THAT**
   .....1. God is very wealthy.
   .....2. Our wealth is really God's.
   .....3. God wants all our money.

21. **Wash you, make you clean; put away the evil of your doings from before mine eyes MEANS THAT**
   .....1. Cleanliness is next to godliness.
   .....2. God desires us to cleanse ourselves from sins.
   .....3. God judges us by how clean our bodies are.

22. **Out of their silver and gold they have made idols to their destruction MEANS THAT**
   .....1. Silver and gold make the best idols.
   .....2. It is a waste to use silver and gold for idols.
   .....3. Idols bring troubles to their makers.

23. **The grass withers, the flower fades, but the word of God shall stand forever MEANS THAT**
   .....1. The life of flowers and grass is very short.
   .....2. God's word is always true.
   .....3. We ought to be always thinking about God.

24. **He that gets riches unjustly shall leave them in the midst of his days MEANS THAT**
   .....1. Money wrongly gotten will not be long enjoyed.
   .....2. A thief is not apt to reach an old age.
   .....3. Having money is a joy however we get it.

25. **Thou wilt keep him in perfect peace, whose mind is stayed on thee MEANS THAT**
   .....1. God wants us to live quiet lives.
   .....2. Strong faith in God gives a man a calm heart.
   .....3. If we want to be well off, we shall obey God.

26. **O Israel, return unto the Lord thy God, for thou hast fallen by thy sins MEANS THAT**
   .....1. When a people has sinned, it can expect to fall.
   .....2. God does not want the sinner to return till he has fallen.
   .....3. A sinful people ought to turn to God for help.

27. **Seek good and not evil, that you may live MEANS THAT**
   .....1. Men who do evil die young.
   .....2. Right doing means real living.
   .....3. Do good only for a reward.

PART II

SECTION A

DIRECTIONS: Section A is made up of four longer sayings of the prophets. After each, several questions are asked to be answered by either YES or NO. UNDERLINE the RIGHT answer for each question, as

SAMPLE: They shall not hurt nor destroy in all my holy mountain; for the earth shall be full of the knowledge of the Lord, as the waters cover the sea.

1. Does this passage (quotation) mean that men who really know about God will not harm one another? ..... **YES** NO

2. Does this passage mean that knowing about God makes men want to harm each other a great deal? ..... YES **NO**

1. **I (God) hate, I despise your feasts, and I will take no delight in your solemn assemblies. Yea, though ye offer me your burnt offerings and meal offerings, I will not accept them; neither will I regard the peace offerings of your fat beasts. Take thou away from me the noise of thy songs; for I will not hear the melody of thy viols. But let justice roll down as waters and righteousness as a mighty stream.**

   1. Does this passage mean that God likes our large offerings when we live unjustly? ..... YES NO
   2. Does this passage mean music in religion does not please God when there is lack of justice? ..... YES NO
   3. Does this passage mean that just living is more important than the giving of offerings? ..... YES NO
   4. Does this passage mean that doing good deeds comes before music and song in religion? ..... YES NO

2. **Seek the Lord while he may be found,**
   Call upon him while he is near.
   Let the wicked forsake his way,
   And the unrighteous man his thoughts;
   And let him return unto the Lord,
   That he may have pity upon him,
   And to our God, for he shall abundantly pardon.

   1. Does this passage mean that God is interested in sinners? YES NO
   2. Does this passage mean that sinners should know that God will not do anything for them? ..... YES NO
   3. Does this passage mean that God has only warning and punishment for sinners? ..... YES NO
   4. Does this passage encourage sinners to return to God because he will be kind and forgiving? ..... YES NO

3. **It shall come to pass in the last days that the mountain of the Lord's house shall be exalted above the hills, and all nations shall flow unto it. And many peoples shall go up to the mountain of the Lord, and he will teach us his ways and his laws so that we can walk in his paths. He shall judge between the nations and shall rebuke many people: and they**

shall beat their swords into plow shares, and their spears into pruning hooks: nation shall not lift up sword against nation, neither shall they learn war any more.

1. Does this passage mean that God will teach men His ways to bring peace among peoples? ..... YES NO
2. Does this passage mean that when peoples really follow God's ways they will destroy their weapons of war? ..... YES NO
3. Does this passage mean that trusting in God's ways will lead nations and peoples into wars? ..... YES NO
4. Does this passage mean that it is God's wish for nations to keep their weapons ready for war? ..... YES NO

4. **Thus saith the Lord,**

Let not the wise man boast of his wisdom,
Nor the strong man boast of his strength,
Nor the rich man boast of his riches!
But if one must boast, let him boast of this,
That he understands and knows me—
How I, the Lord, am He who practices
Kindness, justice, and righteousness on the earth;
For in these things I delight.

1. Does this passage mean that God does not want us to boast about our wisdom, strength, and riches? ..... YES NO
2. Does this passage mean that kindness and justice are more important than wisdom and riches to God? ..... YES NO
3. Does this passage mean that we are to feel proud of our wealth and knowledge and strength? ..... YES NO
4. Does this passage mean if we have to boast we can tell about knowing a good God? ..... YES NO
5. Does this passage mean that strength, riches, and wisdom make life great whatever our character may be? ..... YES NO
6. Does this passage mean that God wants us to boast about how good HE is? ..... YES NO

SECTION B

DIRECTIONS: In this part there are four more long quotations from the prophets. Following each are some statements concerning the meaning of the quotations. In every instance check by X the right answer.

1. **With what shall I come before the Lord and bow myself down before Him? Shall I bring Him burnt offerings, calves a year old? Will He be pleased with thousands of rams, or with ten thousands of rivers of oil? Shall I give my first born, my son, for my sin? He hath showed thee, O man, what is good; and what doth God require of thee, but to do justly, and to love mercy, and to walk humbly with thy God?**

1. God does not like great sacrifices when
   - .....1. they use up good food.
   - .....2. they keep men from acts of mercy.
   - .....3. they cost poor people too much.

2. God's test of true religion is
   .....1. giving Him large gifts.
   .....2. going to services of worship.
   .....3. doing kind deeds.

2. **If you thoroughly amend your ways and your doings, if you thoroughly work justice between a man and his neighbor, if you oppress not the stranger, the fatherless, and the widow: then will I cause you to dwell in this place for ever and ever.**
   1. This passage means that if people change their ways and do good,
      .....1. they will be rewarded.
      .....2. they can always serve others.
      .....3. their acts won't be evil.
   2. This passage means that God's blessings are given to worthy men
      .....1. so that others will praise them.
      .....2. to make them feel good.
      .....3. as merits won.

3. **Hath a nation changed its gods, which are no gods? but my people have changed their glory for that which does not profit. For they have committed two evils: they have forsaken me, the fountain of living waters, and have made them cisterns, broken cisterns, that cannot hold water.**
   1. In this passage, the fountain of living waters refers to
      .....1. new hope for the people.
      .....2. God.
      .....3. wisdom
   2. In this passage, the broken cisterns refer to
      .....1. manufactured gods.
      .....2. the ignorance of the people.
      .....3. poor wells.
   3. In this passage, the 'no gods' were no good because
      .....1. they were man-made.
      .....2. they did not hold truth for man's needs.
      .....3. they will not last long.
   4. If you change from a good God to new gods,
      .....1. you can become like other people.
      .....2. the new gods may be easier on you.
      .....3. you may do yourself much wrong.

4. **Moreover, the Lord said: Because the daughters of Judah are haughty and walk with stretched forth necks and wanton eyes, walking and mincing as they go: in that day the Lord will take away the bravery of their tinkling ornaments, the chains, the bracelets, the mufflers, the bonnets and the headbands, the earrings, the rings and the crisping pins, the glasses and the fine linens and the hoods and the vails.**
   In this passage God does not approve of the jewelry and the fine clothes because
      .....1. they make people proud.
      .....2. women wear them too much.
      .....3. they are very expensive.

PART III

DIRECTIONS: Following each of the quotations given below is a statement of explanation having three endings. Check with an X the ending that gives the statement the **best** meaning, as

SAMPLE: There is no peace, saith the Lord, unto the wicked MEANS THAT

The wicked lack peace because of ....
.....God's anger.
..X.. their own sin.
.....the opposition of good men

1. **My thoughts are not your thoughts, neither are your ways my ways, saith the Lord, MEANS THAT**

God's thoughts and ways are ....
.....for men to study.
.....found in the Bible.
.....not on our level.

2. **I will heal their mistakes, I will love them freely, for mine anger is turned away from them, saith the Lord MEANS THAT**

When God loves a people, He ....
.....always punishes them.
.....does not see their sins.
.....does not refuse them a second chance.

3. **The son shall not bear the sin of the father, neither shall the father bear the sin of the son; the soul that sinneth, it shall die MEANS THAT**

Wrong-doing .....
.....carries its own penalty.
.....causes the children to suffer.
.....ought not bother the father who sins.

4. **Who is a God like unto thee, that pardons sin, holding not his anger forever, because he delights in kindness MEANS THAT**

The greatness of God lies in His great .....
.....strength.
.....sternness.
.....kindness.

5. **Not by arms nor by force but by my spirit, saith the Lord of hosts MEANS THAT**

God's purposes shall be attained
.....without much help from us.
.....only in heaven.
.....by God's help through us.

6. **Cease to do evil, learn to do well; seek justice, defend the rights of the fatherless, plead for the widow MEANS THAT**

Doing good or evil depends upon
.....what our motives are.
.....what the law is.
.....what we think of widows and orphans.

7. **Seek the welfare of the city where you have been taken as captives, for in its peace you shall have peace MEANS THAT**

For captives peace is .....
.....hard to get.
.....the result of good conduct.
.....the gift of God.

8. **The work of righteousness shall be peace and the effect of justice quietness and confidence MEANS THAT**

If we are righteous, we shall have .....
- .....many friends.
- .....peace of mind.
- .....much work to do.

9 **Woe to those that are wise in their owns eyes and intelligent in their own sight MEANS THAT**

A boastful opinion of one's self .....
- .....is a sign of strong character.
- .....makes others think us important.
- .....is apt to lead to trouble.

10 **You shall seek me and find me when you shall seek me with all your heart MEANS THAT**

Finding God .....
- .....is a matter of earnest desire.
- .....depends upon knowing where He is.
- .....takes a great deal of hard searching.

11. **When the Ethiopian (black man) can change his skin and the leopard his spots, then the man used to evil deeds may do good MEANS THAT**

It is difficult for .....
- .....evil doers to do good.
- .....black men to do evil.
- .....leopards to lose their spots.

12. **They that wait upon the Lord shall renew their strength, they shall run and not be weary, they shall walk and not faint MEANS THAT**

If we need more strength, we can have it by .....
- .....saving our strength.
- .....seeking God's help.
- .....careful training.

13. **Since I (God) have known you (Israel) of all the families of the earth, I will punish you for all your sins MEANS THAT**

The nation that has been close to God will .....
- .....know Him well.
- .....do the right easily.
- .....receive full punishment for sins.

14. **For they (sinful Israel) have sown the wind and they shall reap the whirlwind MEANS HTAT**

The results of sins .....
- .....are more than you expect.
- .....are quickly ended.
- .....blow away and disappear.

15. **For I (God) delight in mercy, not sacrifice (gifts), and in the knowledge of God rather than burnt offerings MEANS THAT**

The heart of religion is .....
- .....bringing large gifts to God.
- .....careful study of the Bible.
- .....doing good deeds.

16. **Woe to him that says to an idol of wood, Awake, or to the dumb stone, Arise and teach MEANS THAT**

Trust in the teachings of an idol .....
- .....is a sign of ignorance.
- .....is sure to cause trouble.
- .....is a waste of strength.

17. It is rebellious people who say, Speak to us agreeable words, give us false visions (dreams, messages) MEANS THAT

People who rebel against God ... MEANS THAT ..... have minds of their own. ..... are brave to oppose Him. ..... fear the truth.

18. Woe to him that builds his house by unrighteousness and makes his neighbor work without pay MEANS THAT

When a man builds a house unjustly with his neighbor's help, he will ... MEANS THAT ..... save himself some money. ..... make his neighbor hate him. ..... suffer for his hard bargain.

19. Woe to those who join house to house, who add field to field until there is no room left MEANS THAT

Men who greedily buy all the land they can lay their hands on are ... MEANS THAT ..... land-crazy. ..... preparing for future trouble. ..... proud of their large estates.

20. The silver and the gold are mine, saith the Lord MEANS THAT

If we have money we must ... MEANS THAT ..... give it all to God. ..... see that it is God's. ..... spend it while we can.

21. Wash you, make you clean; put away the evil of your doings from before mine eyes MEANS THAT

God wants us to ... MEANS THAT ..... be free from wrong deeds. ..... do right while He is watching. ..... have clean hands.

22. Out of their silver and gold they have made idols to their destruction MEANS THAT

Even silver and gold idols do not ... MEANS THAT ..... save people from disaster. ..... have great power. ..... look God-like.

23. The grass withers, the flower fades, but the word of God shall stand forever. MEANS THAT

The word of God is very important because ... MEANS THAT ..... its truth lives on. ..... we can always get Bibles. ..... it does not wither.

24. He that gets riches unjustly shall leave them in the midst of his days MEANS THAT

When we get riches unjustly, we ... MEANS THAT ..... may lose our good name. ..... need not expect to enjoy them long. ..... shall have to care for them to keep them.

25. Thou wilt keep him in perfect peace, whose mind is stayed on thee MEANS THAT

God cares greatly for those who ... MEANS THAT ..... have firm trust in Him. ..... are always praising Him in public ..... know how strong He is.

26. **O Israel, return unto the Lord thy God, for thou hast fallen by thy sins MEANS THAT**

When we have fallen into sin, ...can expect to be punished.
we ....had better keep away from God.
.....can find help from God.

27. **Seek good and not evil, that you may live MEANS THAT**

.....never harm anybody.
If you try to do right, you will .....have happy lives.
.....make others happy.

APPENDIX B

A LIST OF CHILDREN'S BIBLES AND TEXTS OF PROPHETIC MATERIALS

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APPENDIX C

A LIST OF THE OLD TESTAMENT PASSAGES USED IN THE COMPREHENSION TEST

Parts I and III

Item	Reference	Item	Reference
1	Isaiah 55:8	15	Hosea 6:6
2	Hosea 14:4	16	Habakkuk 2:19
3	Ezekiel 18:20	17	Isaiah 30:9-10
4	Micah 7:18	18	Jeremiah 22:13
5	Zecharia 4:6	19	Isaiah 5:8
6	Isaiah 1:17	20	Haggai 2:8
7	Jeremiah 29:7	21	Isaiah 1:16
8	Isaiah 32:17	22	Hosea 8:4
9	Isaiah 5:21	23	Isaiah 40:8
10	Jeremiah 29:13	24	Jeremiah 17:11
11	Jeremiah 13:23	25	Isaiah 26:3
12	Isaiah 40:31	26	Hosea 14:1
13	Amos 3:2	27	Amos 5:14
14	Hosea 8:7		

Part II

Section A

1	Amos 5:21-24
2	Isaiah 55:6-7
3	Micah 4:1-3
4	Jeremiah 9:23-24

Section B

1	Micah 6:6-8
2	Jeremiah 7:5-7
3	Jeremiah 2:11-13
4	Isaiah 3:16-23

APPENDIX D

Table A

Correlations Between the Percentages of Right Answers to the Items in Parts I, II, and III for Adjacent Ages

Mental Age	Part	r	PE
8-9	I	.711	.063
	II	.919	.019
	III	.873	.031
9-10	I	.845	.037
	II	.907	.024
	III	.883	.028
10-11	I	.565	.088
	II	.944	.015
	III	.949	.015
11-12	I	.685	.068
	II	.552	.090
	III	.908	.024
12-13	I	.804	.046
	II	.833	.040
	III	.920	.019
13-14	I	.924	.019
	II	.885	.029
	III	.944	.015
14-15	I	.911	.022
	II	.842	.037
	III	.971	.007
15-16	I	.451	.102
	II	.952	.013
	III	.970	.007

Table B

Correlations between the Percentages of Right Responses to All Items in Part I and the Percentages of Right Responses to the Corresponding Items in Part III, for Each Mental Age

Mental Age	r	PE
8	— .05	.1299
9	— .22	.123
10	— .34	.115
11	— .11	.1287
12	— .06	.1297
13	— .06	.1297
14	.03	.1301
15	.12	.1281
16	.41	.1084

Table C

Average Percentage of Right Answers for each Item of the Test (for all individuals tested)

Item	Part I	Part II	Part III
1	77	84	20
2	68	62	70
3	80	61	64
4	63	72	85
5	73	55	66
6	76	62	49
7	61	65	30
8	58	81	54
9	46	88	77
10	74	75	66
11	48	88	66
12	74	84	81
13	47	79	48
14	58	82	65
15	74	80	54
16	57	85	46
17	41	86	69
18	56	52	68
19	70	58	46
20	83	68	67
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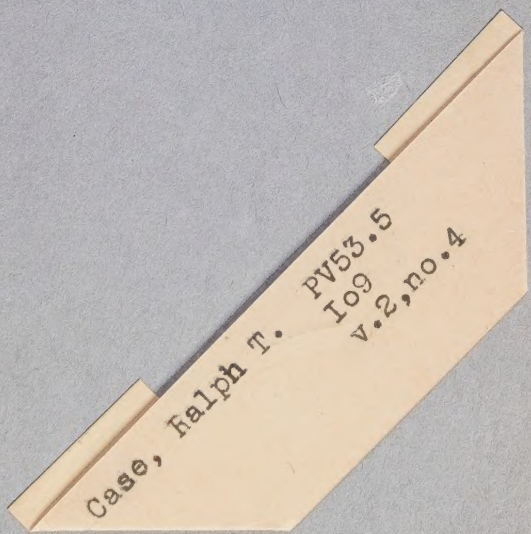

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